

BURST/PIPELINED EDO MEMORY DEVICE

ABSTRACT

5 An integrated circuit memory device is designed for high speed data access and
for compatibility with existing memory systems. An address strobe signal is used to latch
a first address. During a burst access cycle the address is incremented internal to the
device with additional address strobe transitions. A new memory address is only required
at the beginning of each burst access. Read/Write commands are issued once per burst
10 access eliminating the need to toggle the Read/Write control line at the device cycle
frequency. Transitions of the Read/Write control line during a burst access will terminate
the burst access, reset the burst length counter and initialize the device for another burst
access. The device is compatible with existing Extended Data Out DRAM device
pinouts, Fast Page Mode and Extended Data Out Single In-Line Memory Module
15 pinouts, and other memory circuit designs. Additionally, a DRAM is provided having
both pipelined and burst Extended Data Out modes of operation and the ability to switch
between them. ^

b2